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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|----------------------|------------------|
| 10/666,568 | 09/19/2003 | William F. McNally | 7668-4 | 8606 |
| 30448 | 7590 | 04/07/2006 | EXAMINER | |
| AKERMAN SENTERFITT P.O. BOX 3188 WEST PALM BEACH, FL 33402-3188 | | | ABRAMOWITZ, HOWARD E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1762 | |

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|----------------------------------|------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/666,568 | MCNALLY ET AL. |
| | Examiner Howard E. Abramowitz | Art Unit 1762 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 January 2006.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 4,5 and 14-19 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-3 and 6-13 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 19 September 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>7/18/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of group I claims 1-13 in the reply filed on 1/27/06 is acknowledged. The traversal is on the ground(s) that patents drawn towards a process of coating an organic substrate will yield patents drawn towards the product formed. This is not found persuasive because the product claims are not limited to the method described in the claim but rather the product can be formed by any method that yields the claimed product. This puts an additional burden on the examiner to search other classes which may contain the product claims.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gabara et al. (US Patent No. 5,302,415) in view of Arcilesi et al (US Patent No. 4,204,013).

Referring to claim 1, Gabara et al. discloses a method for coating an inorganic substrate with silver, which comprises, scouring the organic substrate by placing them in a sulfuric acid solution, the substrate was then sensitized by placing it in a solution comprising stannous chloride, then the substrate was placed in a silver salt solution which inherently deposits silver oxide on the organic substrate as no reducing agent is present the solution further includes ammonium hydroxide as a complexing agent, the solution then has a reducing agent added which acts to reduce the silver oxide to metallic silver (column 8 lines 39-64). It does not disclose contacting the pre-metallized organic substrate with Na₄EDTA prior to placing the substrate into the electroless silver bath. However, Arcilesi et al. discloses that an Na₄EDTA treatment prior to electroless plating plastic substrates and after sensitization in a stannous chloride solution acts to accelerate the deposition during the electroless process and make the substrate more receptive to electroless plating (abstract, column 3 lines 6-45, example 1). Accordingly, it would have been obvious to one of ordinary skill in the art to modify Gabara et al. to include an acceleration step as taught by Arcilesi et al. with an expectation that this step

will accelerate the electroless deposition and make the substrate more receptive to the plating process.

Referring to claim 2, Gabara et al. discloses that the substrate is polymeric yarn or fiber (example 3).

Referring to claim 6, Gabara et al. discloses that the scouring comprises washing the substrate in an acidic solution which is an aqueous solution (table 4).

Referring to claim 7, Gabara et al. discloses that the tin salt is stannous chloride (example 3).

Referring to claim 8, Gabara et al. discloses that the tin solution comprises an inorganic acid, hydrochloric acid (example 3).

Referring to claim 9, Gabara et al. discloses that the silver salt is silver nitrate and the complexing agent is ammonia hydroxide.

Referring to claims 10 and 11, Gabara et al. discloses that the reducing agent is formaldehyde (example 3)

Referring to claim 12, Gabara et al. discloses that the pre-metallization solution omits a water soluble solvent (example 3).

Referring to claim 13, Gabara et al. discloses that the pre-metallization solution and the Na₄EDTA solution do not contain a surfactant (example 3). However, the silver plating solution contains a wetting agent. However, Arcilesi et al. discloses that after the acceleration treatment an electroless plating process is performed that excludes a wetting agent (example 1). Accordingly, one of ordinary skill in the art would find it obvious that when employing the accelerating step to render the substrate more

receptive to the electroless plating that a surfactant is no longer necessary to help increase the plating rate.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gabara et al. in view of Arcilesi et al. in further view of Rheaume (US Patent No. 4,312,913).

Referring to claim 3, Gabara et al. in view of Arcilesi et al. disclose all of the features of the claim as discussed above except they do not disclose weaving the fiber into a textile. However, Rheaume teaches that using metallized yarns and weaving them together are useful for heat conduction paths for the efficient transferring of heat from a substrate (abstract). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Gabara et al. in view of Arcilesi et al. to use the metallized yarns as a woven heat transfer device as suggested by Rheaume as this is a suitable end product for such metallized yarns.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Howard E. Abramowitz whose telephone number is 571-272-8557. The examiner can normally be reached on monday-friday 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on 571-272-1423. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


HEA


MICHAEL CLEVELAND
PRIMARY EXAMINER